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PRECOOKED FROZEN FISH PREPARATIONS 1/

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Frozen food production is a subject in which much interest is being shown at the present time and many companies are ready to expand in this field as soon as facilities are available. Besides fresh frozen fruits, vegetables, fishery products, and meats, a few precooked frozen products such as baked beans, chicken a la king, and fruit and vegetable purees are now available commercially. Precooked frozen foods are relatively new and, although a number of companies have experimented with this type of product, the variety offered thus far is limited.

Precooked frozen foods are cooked, ready-to-eat dishes which have been frozen and stored at below-freezing temperature. Ready on a moment's notice, they constitute a boon to the busy homemaker. Most of the dishes require only heating before they are ready to serve. Although pre-thawing is to be recommended, many products may be heated directly from the frozen state. Interesting menus can be arranged when this type of product is used, for the possibility of variety is great. By preparing a larger quantity of a family favorite than is necessary for a single meal, and freezing and storing the excess in the refrigerated locker, the homemaker provides for a future meal with very little extra labor.

Fishery products are particularly adaptable for use in preparing precooked frozen foods for, like fruits and vegetables, they are seasonal and vary greatly in price during the year; therefore, it is well to preserve them while they are abundant. Some of the most palatable ways of serving seafoods are in "dishes" such as chowders, loaves, newburgs, and a la kings. The delicate flavor and texture of fishery products are well preserved in precooked frozen dishes. A number of such foods, including creamed fish, casserole dishes, chowders, fritters, and flakes have been prepared and frozen in the Fishery Technological Laboratory of the U. S. Fish and Wildlife Service at Seattle.

Creamed dishes which have been frozen include a la kings and fish flakes in cheese sauce. Interesting variations of these simple recipes are achieved

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1/Reprinted from The Food Packer, August 1945, pages 42-44.

by serving in a buttered noodle ring, over baking powder biscuits, in patty shells, or with steamed rice. These preparations, after months of freezer storage, are as smooth textured and fresh flavored as when they were first prepared.

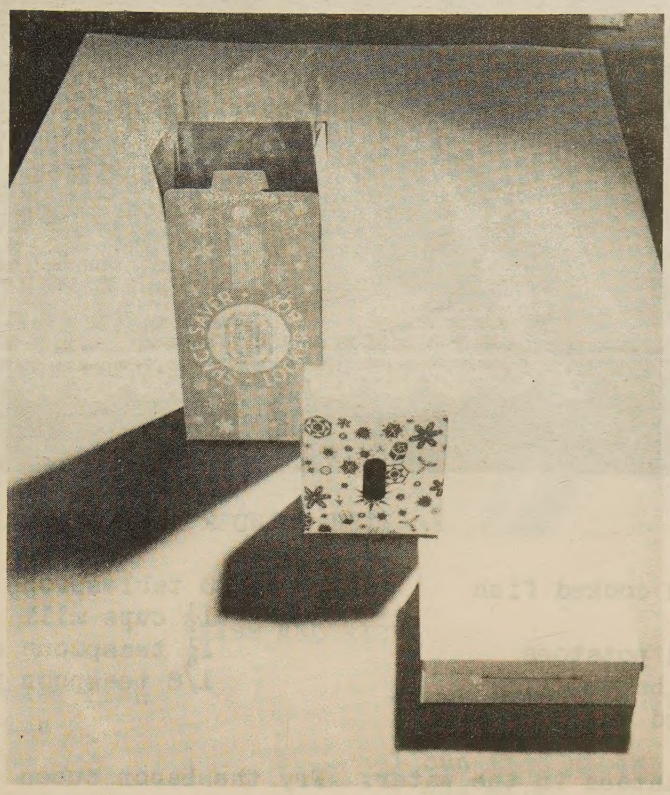
The time and money-saving qualities of fish entrees "en casserole" are accentuated when prepared in quantity and frozen. Preparations of this type include fish and rice, fish in creole sauce, and fish hash. Fish and rice is a mixture of rice and fish flakes with a tomato sauce. The original recipe included hard-cooked eggs, but this is one item which does not survive freezing for it becomes progressively tougher on storage. With the omission of the eggs or the inclusion of substitutes such as sliced olives or sweet pickle, fish and rice is a very palatable product. Fish in creole sauce is a tasty dish which is simple to prepare. Upon frozen storage, the flavor of the sauce permeates the fish so that the frozen product is better than the unfrozen one.

Fish and potatoes are an almost inseparable combination and one dish in which they are particularly well blended is fish hash. Preparation of this dish for freezing is simple, and serving is easy since the fish hash may be heated either in a frying pan or baked in the oven. With its fresh tang of chopped onion, few could distinguish it from its unfrozen counterpart.

Clam fritters, popular wherever they are served, cannot be classified as a wholly precooked food for the final cooking of the batter is done after thawing. Experience has indicated that it is better to prepare the fritter mix with cooked clams since the use of raw clams resulted in a product that did not store well. The flavorful, piping hot clam nuggets make a hit at all times.

Precooked frozen fish products are adaptable to both commercial and home production. Recipes are no more complicated than those used in canneries, restaurants, and homes. In the home as well as in commercial establishments there are often available quantities of fish flakes which could easily be incorporated into various prepared products. In the fresh fish industry, for instance, flakes might be recovered from the collar portion or around the backbone of fish from which the fillets have been removed or from the tail and collar portions of fish which have been steaked. The homemaker may have unused cooked fish or an excess of fresh fish which might be made into a ready-to-eat product and frozen for future use.

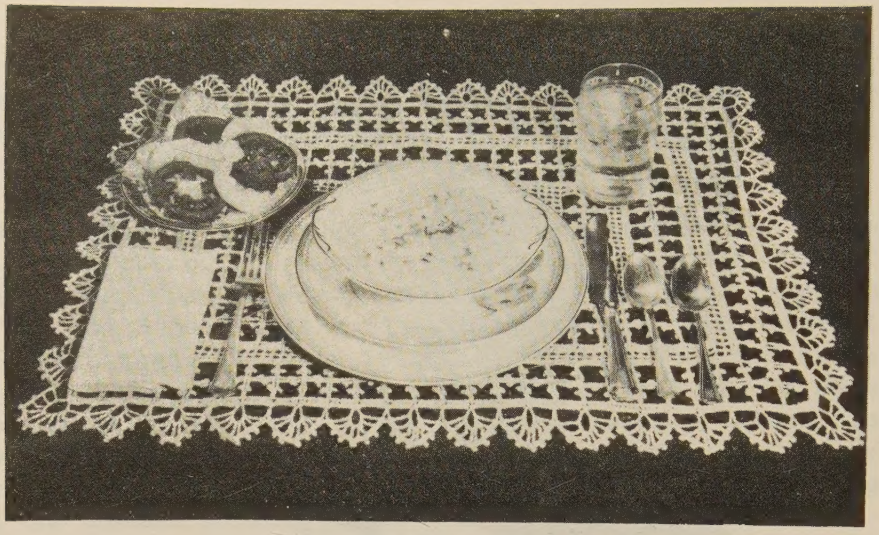
The experimental procedure has been to prepare the food as though it were to be served immediately, cool quickly, pack, and freeze. Lightly waxed fibreboard containers with heat-sealing moisture-vapor-proof cellophane liners were used to pack all of the food products. These were kept in an ordinary frozen food locker such as is available to the general public. Most of the preparations have remained in a satisfactory condition after storage for periods as long as eight months, at a temperature of approximately 10° F. (considerable fluctuation in temperature occurred from day to day).



Containers for packing precooked
frozen fish preparations

With the exception of the fritters, all of the products prepared can be heated without first thawing and served immediately. It is difficult, if not impossible, to distinguish them from their freshly prepared counterparts in regard to either flavor or appearance. Convenience and the high quality of the product as it appears on the table are the two factors which should encourage the use of precooked frozen foods.

The following recipes are a few of those which yielded dishes found to be particularly adaptable to freezing. Recipes are given for servings for six persons but ordinarily it would be recommended that larger quantities be prepared for freezing and packed in individual containers holding family size servings.



FISH CHOWDER

1 cup flaked cooked fish
½ cup water
2 cups cubed potatoes
¼ cup diced bacon
1 cup chopped onion
3 tablespoons flour
1½ cups milk
1¼ teaspoons salt
1/8 teaspoon pepper

Cook the potatoes in the water. Fry the bacon cubes until slightly brown. Add the onion and fry until golden brown. Blend in the flour. Add the salt and pepper and stir in the milk gradually. Heat just to boiling. Add the flaked fish, cooked potatoes, and potato water and mix. Pack.

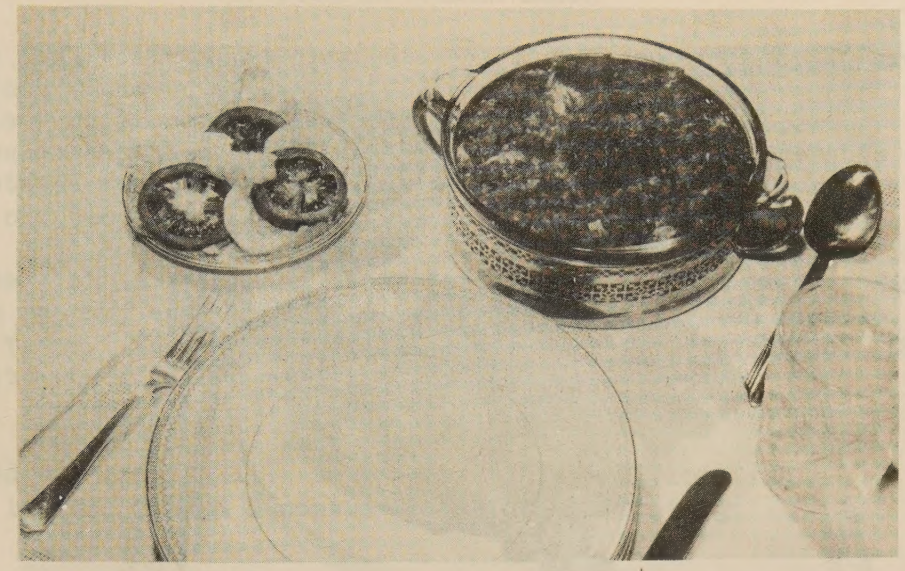
To use: Thaw, add an equal quantity of milk, heat, and serve.
Fish used experimentally: Canary rockfish; ling cod.
Storage tests: Good after 5 months of storage.

FISH CREAMED IN CHEESE SAUCE

1 cup flaked cooked fish
3 tablespoons vegetable oil
½ tablespoon grated onion
¼ cup flour
3/4 teaspoon salt
1/16 teaspoon pepper
2 cups milk
¼ teaspoon Worcestershire sauce
1 teaspoon lemon juice
1½ tablespoons grated sharp cheddar cheese
½ tablespoon finely chopped fresh parsley

Cook the onion in the oil until slightly browned. Add the flour, salt, and pepper. Blend. Add milk gradually and cook until thickened with stirring. Add the Worcestershire sauce, lemon juice, and the grated cheese. Cook until cheese has melted and is well blended. Add parsley and flaked fish. Pack.

To use: Thaw; thin to desired consistency with milk, heat, and serve.
Fish used experimentally: Ling cod.
Storage tests: Good after 5 months of storage.



FISH AND RICE

3 cups flaked cooked fish
1 cup uncooked rice
1 cup tomato puree
1 teaspoon salt
1/4 teaspoon pepper
4 tablespoons butter
1/4 cup flour
1 cup fish stock
1 cup milk

Cook rice in boiling salted water for 10 minutes. Drain and add the tomato puree, salt and pepper. Cook until the rice is tender. Make sauce using the butter, flour, fish stock, and milk. Add the fish to the rice mixture and fold in the sauce. Pack.

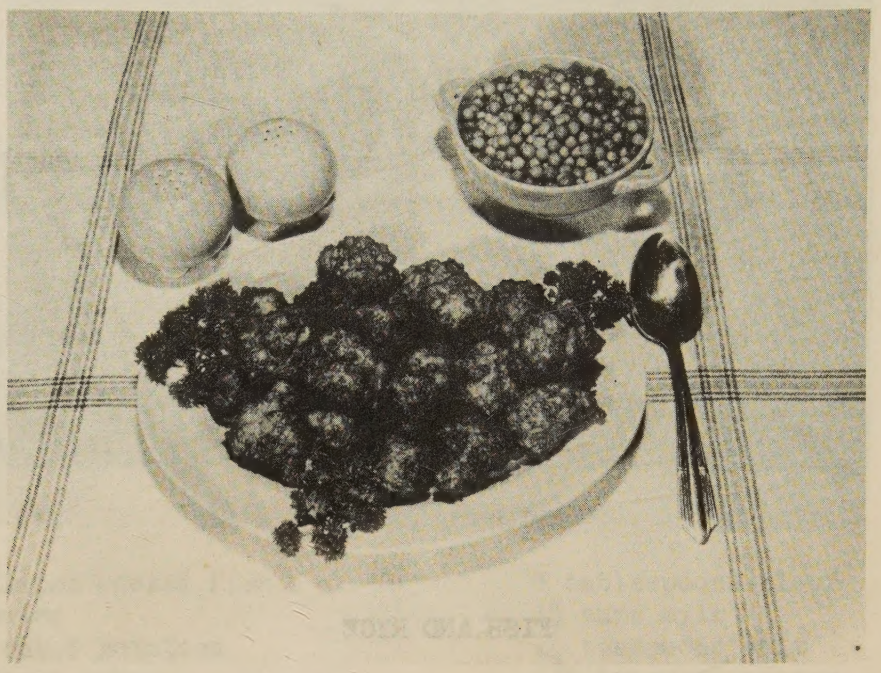
To use: Heat and serve.
Fish used experimentally: Silver salmon.
Storage tests: Good after 8 months of storage.

FISH A LA KING

1 cup flaked cooked fish
½ cup minced green pepper
1½ tablespoons minced pimento
2 tablespoons butter
¼ cup flour
7/8 teaspoon salt
1/16 teaspoon pepper
2 cups milk

Simmer green pepper and pimento in the butter until tender. Add flour, salt, and pepper. Stir in milk gradually. Cook with stirring until thickened. Add fish flakes. Pack.

To use: Heat and serve.
Fish used experimentally: Canary rockfish; ling cod.
Storage tests: Good after 8 months of storage.



CLAM FRITTERS

1 pint cooked clams
1 cup sifted flour
1½ teaspoons baking powder
½ teaspoon salt
1 egg, beaten
½ cup milk
1 teaspoon fat, melted

Chop clams finely. Sift dry ingredients together. Combine the beaten egg, milk and melted fat. Add this mixture gradually to the dry ingredients, stirring only until the batter is smooth. Add the clams. Pack. Upon thawing drop by spoonfulls into deep fat heated to 365° F. Remove when fritters are a golden brown (about 2 minutes) and drain on absorbent paper.

FISH HASH

1½ cups flaked cooked fish
3 tablespoons bacon cut in small cubes
1½ cups chopped boiled potatoes
3/4 tablespoon minced onion
3/4 teaspoon salt
1/16 teaspoon pepper

Fry the bacon crisp. Combine all of the above ingredients, including the drippings from the bacon. Mix and pack.

To use: Heat and serve.
Fish used experimentally: Ling cod.
Storage tests: Good after 5 months of storage.

FISH IN CREOLE SAUCE

2 pounds fish fillets cut into 1½ inch cubes
1½ quarts fish stock in which a slice of onion has been cooked
2 cups stewed tomatoes
1/4 cup chopped onion
2 tablespoons chopped green pepper
1 teaspoon salt
1/4 teaspoon pepper
2 tablespoons vegetable oil
2 tablespoons flour

Poach the fish in simmering stock for ten minutes and drain. Simmer the onion, green pepper, and seasonings in the tomatoes for ten minutes. Combine the oil and flour. Add to the tomatoes and cook until thickened. Combine the sauce with the fish and pack.

To use: Heat and serve.
Fish used experimentally: Silver salmon; canary rockfish.
Storage tests: Stored 5 months without deteriorating.

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